

EBS - External Burn System Designed for efficient and economic production

INTRO

The EBS (AKA Ex-Torch) is a diffusion furnace accessory used for pyrogenic oxidation processes. It generates high-purity water vapor by burning Hydrogen in Oxygen. Burning process takes place in an external quartz chamber, so that the source zone of process tube is not affected by hydrogen flame.

FEATURES

Heating to Hydrogen self-ignition temperature is provided by electrical resistance heater.

Though this way of heating is not the fastest one, its robustness and durability pays off the inevitable inconvenience to start heating a bit earlier in the process recipe. Temperature is controlled using industry standard components, like PID Controler, sensing thermocouple and solid state relay. Safety is assured by a reliable flame detector with its output connected to interlock system, which also supervise H₂ and O₂ flow ratio as well as self ingition temperature.

Mechanicaly, EBS consists of two parts. A quartz combusting chamber is fixed in a polished stainless steel case together with heaters and a flame detector. The temperature controler with solid state relay and display are placed in a separate electronics box.







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TECHNICAL DATA

Technical Specifications

Dimensions (width x height x depth)	135 x 130 x 270 mm
Mass	3,5 kg
Supply Voltage	230 V/50 Hz, 4,5 A
Service Temperature Range	0 – 50 °C



